

WHAT IS CLAIMED IS:

1. A semiconductor laser device comprising:
 - a stem having a mounting surface;
 - a first semiconductor laser element directly or
5 indirectly mounted onto the mounting surface of said stem,
said first semiconductor laser element having an emission
wavelength and a temperature dependence; and
 - a second semiconductor laser element disposed on
top of said first semiconductor laser element, said second
10 semiconductor laser element having an emission wavelength
different from the emission wavelength of said first
semiconductor laser element and a temperature dependence
lower than the temperature dependence of said first
semiconductor laser element.
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2. The semiconductor laser device according to claim
1, wherein the emission wavelength of said first
semiconductor laser element is within a wavelength range of
640-660 nm, while the emission wavelength of said second
20 semiconductor laser element is within a wavelength range of
770-800 nm.
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3. The semiconductor laser device according to claim
1, wherein said second semiconductor laser element provided
on top of the first semiconductor laser element is smaller

in size than said first semiconductor laser element such that a part of a top surface of said first semiconductor laser element is exposed.

5 4. The semiconductor laser device according to claim 1, wherein each of said first and second semiconductor laser elements has an N-layer and a P-layer, and either the N-layers or the P-layers of said first and second semiconductor laser elements are adjacent to each other.

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5. The semiconductor laser device according to claim 1, wherein each of said first and second semiconductor laser elements has an emission point and the emission points of said first and second semiconductor laser elements are located at 15 an interval of 160 micrometers or less.

6. The semiconductor laser device according to claim 1, wherein there are a plurality of joined portions in which different soldering materials having different melting 20 points are used.

7. A semiconductor laser device comprising:
a stem having a mounting surface; and
a plurality of semiconductor laser elements
25 disposed one on top of another and directly or indirectly

SEMICONDUCTOR LASER DEVICE

mounted onto the mounting surface of the stem, said plurality of semiconductor laser elements having different emission wavelengths and different temperature dependences;

- 5 wherein said plurality of semiconductor laser elements are stacked in order of temperature dependence such that the laser chip farther from the mounting surface of the stem has a lower temperature dependence than the laser chip closer to the mounting surface of the stem.

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